

Abstract

The object of the present invention is to provide a transmitting apparatus and a transmitting power control method that can provide excellent power efficiency and a wide control range of transmitting output power, and a radio communication apparatus employing the transmitting apparatus.

At the time of high output power, a high- frequency power amplifier (5) is operated as a nonlinear amplifier, whereby power efficiency when a transmitting signal is power- amplified can be enhanced. Further, at the time of low output power, the high- frequency power amplifier (5) is operated as a linear amplifier, whereby the control range of the transmitting output power can be extended. Still further, when the high- frequency power amplifier (5) is operated as a nonlinear amplifier, by varying the input level of the high- frequency power amplifier (5) according to the average output power of the transmitting signal by the variable gain amplifier (7), it is possible to reduce leak power and to extend the control range of the transmitting output power.